



**Investment Report**

**2021**

**Prepared by Patrick Mullen**



# Investment Summary & Thesis

Enterprise Product Partners (NYSE: EPD) is the pre-eminent midstream infrastructure company, the leading North American provider of midstream energy services to producers and consumers of natural gas, natural gas liquids (NGL), crude oil, refined products and petrochemicals. Vertically integrated with best-in-class assets and dominant in the NGL market, EPD is one of the few MLPs that provide these services across the full hydrocarbon value chain.

I initiate a BUY recommendation with a 12-month target price of \$26.45. This reflects over a 28.89% upside from its January 28<sup>th</sup> closing price of \$20.52.

## Key Profit Drivers:

**NGL/Petrochemical segment: demand from Gulf Coast and international markets will allow Enterprise to benefit from the export opportunities.**

- As the largest player in NGL market, Enterprise is most leveraged to forthcoming petrochemical demand pull of NGLs into Gulf Coast. Additionally, its expansion into petrochemical activities insulates EPD from the midstream cyclicality. This is particularly true for the PDH plant with estimated full year gross operating margin of \$764 million.
- With demand slowly resuming to pre-pandemic levels and economic activity beginning to ramp up, Enterprise stands to greatly benefit. With high barriers to entry, new competition is highly unlikely.

**It can aggregate supply of every type of hydrocarbon from multiple sources**

- Operates in major producing basins (Permian, Eagle Ford, DJ, Piceance, Green River) and delivers it to multiple end markets (refiners, petrochemicals, exports). These assets are the linchpins for both shippers and end users.
- EPD has strong network ties, excellent management stewardship, and fixed-fee long term contracts.

**Capital growth projects and strategic partnerships**

- \$3.9B in capital growth projects across value chain, Partnership with Houston Ship Channel, Acquisition of Oiltanking, PDH-2 Plant

EPD Historical Price Chart



Investment Profile	
Ticker	EPD
Current Price	\$20.03
Market Cap.	45.40 Bn
Div. Yield	8.34%
Beta	1.36
P/E	10.53
P/B	1.82
D/E	1.14
ROE	18.28%
Rev 3-Yr Growth	12.51%

The energy sector took a heavy hit during COVID-19, but some companies remained somewhat resilient, at least in terms of strong balance sheets and conservative capital expenditures. With that said, investors should focus on quality balance sheets, a deep inventory of prospects, low costs, and experienced management. Furthermore, with the renewable energy transition that is currently underway, it's important to identify companies which operate across the hydrocarbon chain and have a dominant competitive edge over their competitors. There are significant opportunities in energy, and Enterprise stands out amongst its peers.



## Business Description

Enterprise Products Partners is one of the largest midstream companies with operations servicing most producing regions in the lower 48 states. The company is a leading North American provider of midstream energy services to producers and consumers of natural gas, natural gas liquids, crude oil, refined products and petrochemicals. They engage in the production and trade of natural gas and petrochemicals. Most importantly, Enterprise is particularly dominant in the NGL market and is one of the few MLPs that provide these services across the full hydrocarbon value chain.

### **Operates in the following segments:**

NGL Pipelines & Services, Crude Oil Pipelines & Services, Natural Gas Pipelines & Services, and Petrochemical & Refined Products Services.

### **Wide Arrange of Services include:**

Natural gas gathering, processing, treating, transportation and storage. NGL transportation, fractionation, storage and import and export terminals; crude oil gathering, transportation, storage and terminals; petrochemical and refined products transportation, storage and terminals; and a marine transportation business.



*Source: Enterprise Product Partners*

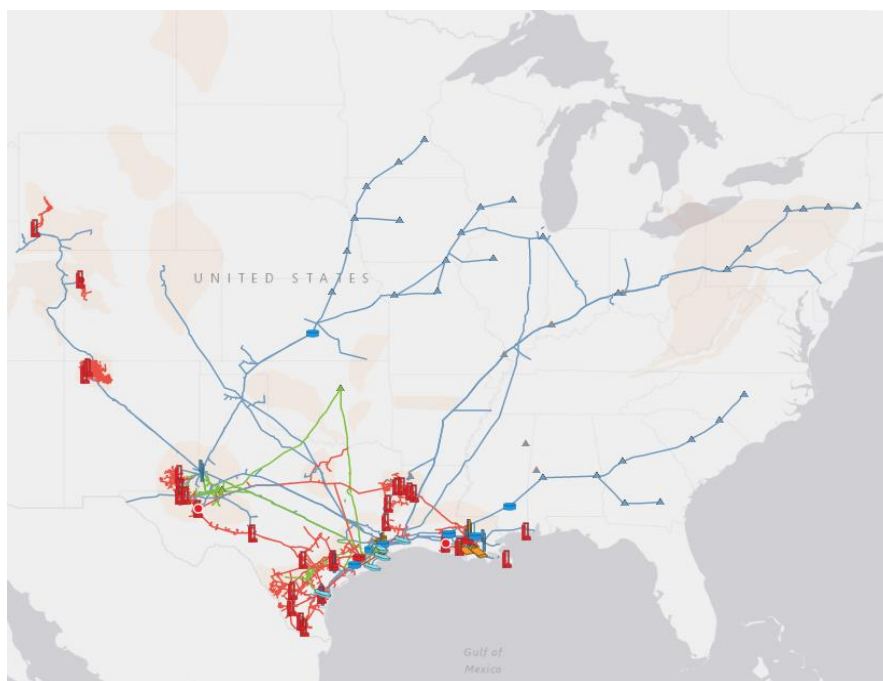
## Key Strategies

- The company's growth strategy is to capitalize in growth demand and increasing exports for the following: Natural gas, NGLs, Crude Oil, Petrochemicals and Refined products.
- The firm must enhance the stability and growth of cash flows. This can be done through additional investments in pipelines.
- Their integration and diversified portfolio of services across the full hydrocarbon value chain needs to be maintained. Therefore, the firm plans to expand upon this asset base through growth projects and accretive acquisitions of midstream assets.
- For growth to occur, Enterprise understands the strategic importance of expanding through different growth projects. These expansions and investments will allow them to maintain their market dominance and allow Enterprise to operate in new opportunities.



# Systems Map & Operations

- Propane Terminal 
- Refined Products Terminal 
- Crude Oil Terminal 
- Import / Export Terminal 
- Natural Gas Processing Plant 
- Natural Gas Marketing Hub 
- Natural Gas Storage 
- NGL Storage 
- NGL Fractionation Facility 
- Octane Enhancement Facility 
- Propylene Fractionation Facility 
- Propylene Dehydrogenation Facility 
- Isomerization Facility 
- Fleet Facility 
- Marine Shipyard 
- Natural Gas Pipelines & Services 
- Liquids Pipelines & Services 
- Crude Oil Pipelines & Services 
- Basin 



Source: Enterprise Product Partners

The company was founded in 1998 and is headquartered in Texas. The firm's NGL Pipelines and Services segment manages natural gas processing plant, Crude Oil Pipelines and Services segment stores and markets crude oil products, Natural Gas Pipelines & Services segment stores, and transports natural gas. Lastly, Enterprise's Petrochemical & Refined Products Services segment offers propylene fractionation, butane isomerization complex, octane enhancement, and refined products.

## Overview of Combined Operations

Pipelines	<ul style="list-style-type: none"> <li>50,000 miles of natural gas, NGL, crude oil, refined products and petrochemical pipelines</li> </ul>
Storage (Salt Dome)	<ul style="list-style-type: none"> <li>260 million barrels (MMBbls) of NGL, refined products and crude oil storage capacity</li> <li>14 billion cubic feet (Bcf) of natural gas storage capacity</li> </ul>
Natural Gas Processing	<ul style="list-style-type: none"> <li>22 natural gas processing plants</li> </ul>
Fractionation	<ul style="list-style-type: none"> <li>23 NGL and propylene fractionators</li> </ul>
Import/Export Terminals	<ul style="list-style-type: none"> <li>Houston Ship Channel has seven deep-water ship docks which can load multi-products</li> <li>Beaumont has five deep-water ship docks which can load multi-products</li> <li>Seaway Texas City and Freeport locations have four deep-water ship docks which can load crude</li> <li>Morgan's Point has two deep-water ship docks which can load ethane</li> </ul>



# Asset Portfolio

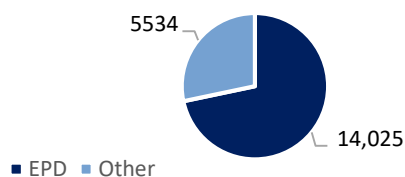
In Millions of USD 12 Months Ending	FY 2020 12/31/2020	
<b>Revenue</b>	<b>32,789.2</b>	<b>100.0%</b>
NGL Pipelines & Services	13,470.7	41.1%
Sales of NGLs	10,934.3	33.3%
Midstream Services	2,536.4	7.7%
Onshore Crude Oil Pipelines & Services	10,287.3	31.4%
Sales of Crude Oil	9,007.8	27.5%
Midstream Services	1,279.5	3.9%
Petrochemical Services	5,861.8	17.9%
Sales of other Petroleum and related Products	4,985.2	15.2%
Midstream Services	876.6	2.7%
Onshore Natural Gas Pipelines & Services	3,169.4	9.7%
Sales of Natural gas	2,075.4	6.3%
Midstream Services	1,094.0	3.3%

Source: Bloomberg

## Total Gas Processing Capacity

Regarding processing capacity of plants in million standard cubic feet per day (MMcf/d), Enterprise receives 9,957 of the 11,770-processing capacities, which is roughly 85%. This comes from complete ownership interest of 27 processing plants of the 40 plants. As for the remaining plants, the firm controls over 50% of the ownership interest and therefore receives much of the capacity. Enterprise has majority ownership in roughly 90% of processing plants it operates in. The diversification across the value chain insulates Enterprise from issues other competitors face.

### NGL Pipeline Length (Miles)



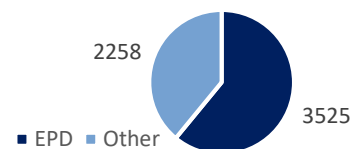
100% ownership of top 7 NGL systems and overall control of 71%

### Crude Oil Terminals: TX & OK



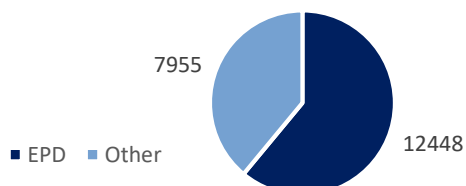
100% ownership of all 6 Crude Oil Terminals

### Crude Oil Pipelines Length (Miles)



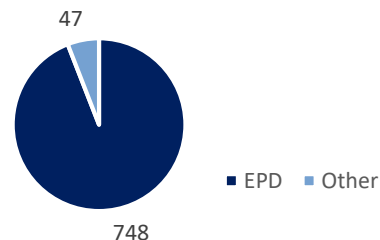
100% in the top 3 of 4 largest. Overall ownership of 60%

### Natural Gas Pipelines (MMcf/d)



Owns 61% of all pipelines (MMcf/d), which is 62% of all pipeline miles

### Petrochemical Pipelines (Miles)

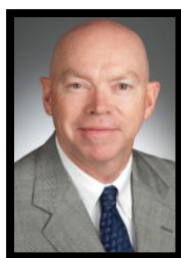


Nearly complete dominance with 94% ownership of all pipelines



## Management & Corporate Governance

As the leading provider of midstream energy services, Enterprise has established a reputation in the industry as a reliable and cost-effective operator. On average the members of the management team have over 30 years of industry experience. The company receives reinvestment of \$100 million annually from the partnership's original cofounder and general partner.



W. Randall Fowler

**Director, Co-Chief Executive Officer and Chief Financial Officer**

W. Randall Fowler serves Director, Co-Chief Executive Officer and Chief Financial Officer since January 2020 and has been the director of Enterprise GP since 2011. Additionally, Fowler served as President and CFO of Enterprise GP from 2018-2020. Fowler joined Enterprise as Director of Investor Relations in 1999 and serves as Chairman of the Board of the Energy Infrastructure Council.

Source: EPD



A. J. Teague

**Director and Co-Chief Executive Officer**

A. James Teague serves as Director and Co-Chief Executive Officer since 2020 and has been a director of Enterprise GP since 2010. Teague previously served as CEO of Enterprise GP from 2016 to 2020, Chief Operating Officer from 2010 to 2015 and Executive Vice President from 2010 to 2013. Teague joined Enterprise through its purchase of midstream energy assets from affiliates in 1999 when he served as President of Tejas Natural Gas Liquids.

Source: EPD

### Board Structure



Randa Duncan Williams

**Chairman of the Board**

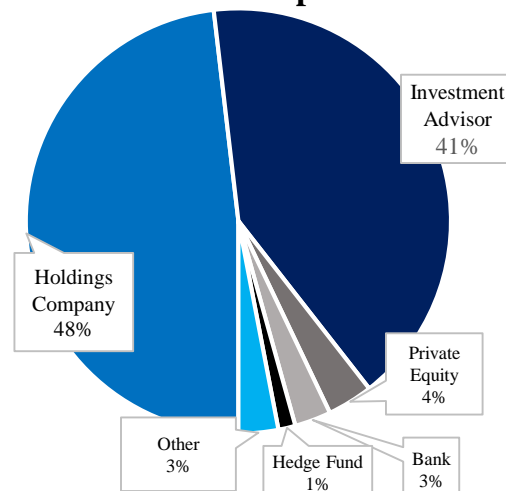
Enterprise's Board of Directors is composed of 11 voting members with 6 of whom being independent advisors. The company allows both Co-Chief Executive Officers to serve on the Board. The Non-Executive Chairman of the Board of Directors is Randa Williams, who also serves as a member of the Governance Committee. The Chairman of the Audit and Conflict Committee of their general partner has been designated as Presiding Director.

Source: EPD

### Shareholder Structure

Of the 2.19 billion shares outstanding, 64.38% are held by institutions. Since the start of the year, the number of buyers increased by 0.53% and new buyers by 19.54%. Over 92% of shares are held in the United States and nearly all shares are held by holdings companies and investment advisors and Private Equity, with 47.74% and 40.96% and 3.4%, respectively. Blackstone Group, Goldman Sachs, Tortoise Midstream Fund, and Bank of America are the top holders, owning 3.21%, 1.91%, 1.22% and 1.10% of all shares outstanding, respectively. Institutional buying has outpaced selling by 44% since September 2020. Sizable positions coming from Blackstone with 47 million additional shares, Brookfield's entering position of 8.4 million, and Acadian Asset Management's entering position of 2.2 million shares. For Blackstone Group, this reflects a 208% increase in their overall position.

### Ownership



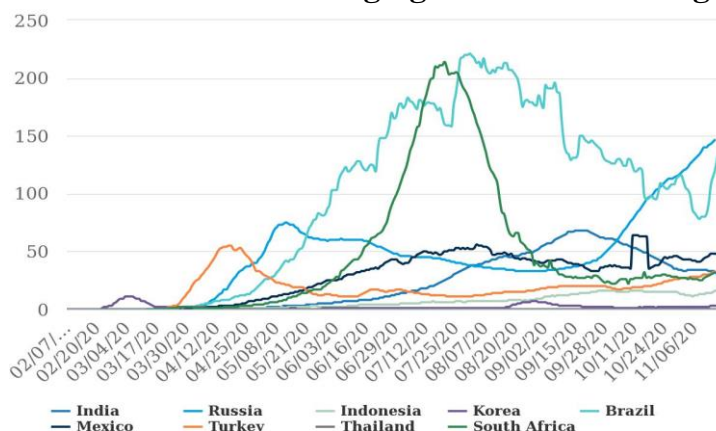




## Macroeconomic Analysis: COVID-19

2020 was undoubtedly a strange year and the impact on the energy sector was massive. This was largely driven by COVID and the harsh economic and travel cutbacks that came as a result of the virus. With that said, 2021 seems to be looked upon favorably, with Morgan Stanley and Goldman Sachs projecting rather strong global GDP growth with the United States leading the developed markets with 5.1% and 5.3% GDP growth, respectively. However, this is assuming global economies can reopen as the world is able to get the virus under control, which seems to have some hint of success.

### COVID Cases in Emerging Markets Declining

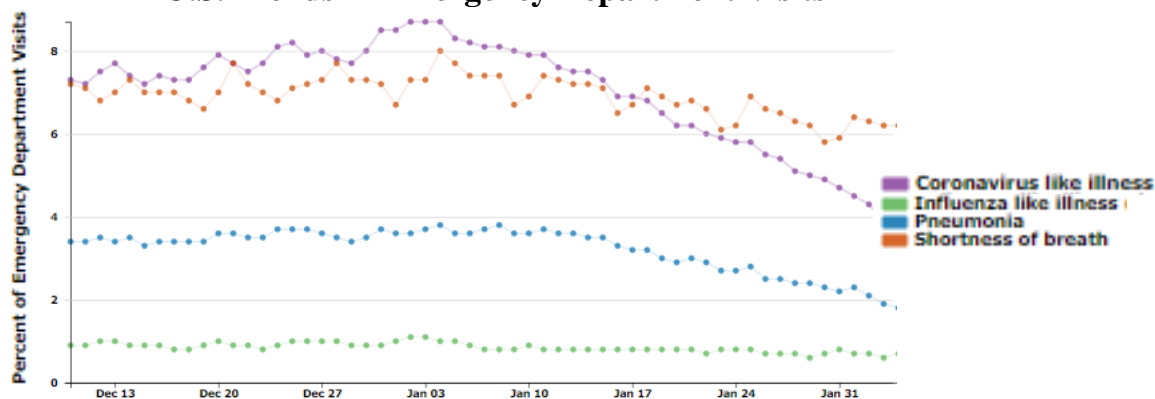


Source: WHO & Morgan Stanley

According to the World Health Organization, COVID-19 cases are on the decline across the emerging markets, except for China. As Europe enters additional restriction periods and several vaccines are deployed, overall cases are on the decline.

Although an overall decline in cases, the resurgence of the virus has created some GDP slowdown. However, with fiscal policies remaining rather expansionary, and the incoming warm weather, coupled with vaccines, many institutions project a strong resurgence from emerging market economies.

### U.S. Trends in Emergency Department Visits



Source: Center of Disease Control

Multiple sources report the U.S. has finally vaccinated more citizens than total cases with a reported 7.8% of Americans having received one shot. Not only is this great news for the entire world, but it also strongly suggests that macroeconomic will begin to revert to its pre-COVID state. Although it may take a few years for global activity to resume at these levels, there is optimism that these vaccines will help thwart the virus. The graphic above shows data from the CDC's tracking of percentage of ED visits in the United States being on the decline. With additional vaccines, better distribution, and availability, hopefully the nation can get a grip over the virus in the early part of 2021.



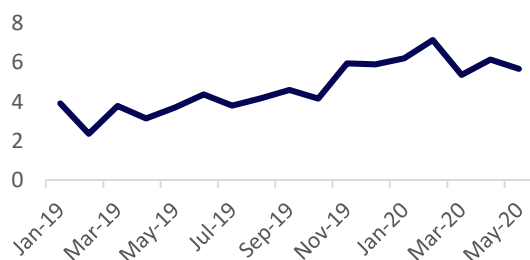
# Industry Overview & Outlook

The oil and gas midstream industry refers to the portion of the oil and natural gas industry which processes, stores, and transports products such as crude oil, natural gas liquids, natural gas, and sulfur. It's referred to as midstream as it operates between the upstream industry (mining, drilling, manufacturing), and the downstream industry (distribution, retail outlets).

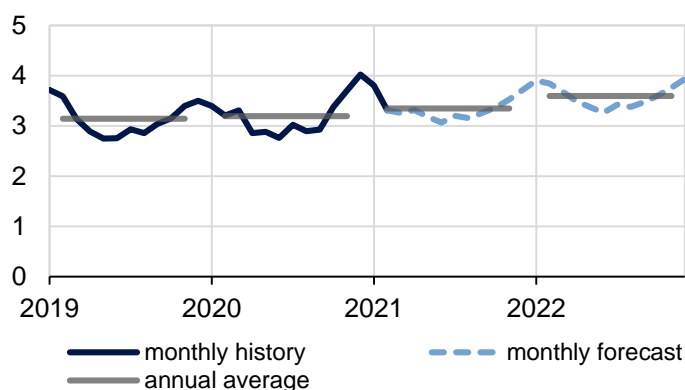
## Outlook

The global midstream oil and gas is currently growing at a CAGR of 4.5% and the gulf of Mexico market is expected to grow at a CAGR of >1.32% through 2025. Increased investment and production are the main drivers. A recovery in LNG exports supports the idea of an attractive industry. According Energy Information Administration (EIA) Crude and NGL production in the lower 48 states to increase through 2022 with global GDP growth of 5.4 in 2021. LNG exports have continued to be supported by global residential and petrochemical demand. Petrochemical products (ethylene and propylene) have remained strong as demand with PPE, other medical containers and increasing demand for durable plastics. With an economic recovery, ethylene and propylene are shown to grow in excess of GDP (roughly 3.3%). Coupled with a favored outlook in the Permian by major and large independents, ROIC has been 3x. With refinery utilization bottoming out, and U.S. ethylene crackers been at reduced capacity, there is plenty room for growth as economic activity resumes.

Worldwide - North American LNG Exports (Units)



U.S. hydrocarbon gas liquids product supplied MMB/D



## Substantial Barriers to Entry



In the U.S., pipelines are approved by regulators only when there is an economic need, and pipeline development takes 3-years, according to the EIA. Regulatory oversight by the Federal Energy Regulatory Commission and at the state and local levels. Projects are locked in through long-term contracts with producers before even breaking ground on the project. If contracts cannot be secured, the pipeline will not be built.

## Tough Competition in a Complex Environment



The industry is dominated by key players with 66% of total revenue in the TTM period coming from 3 companies. Significant difficult in the ability to expand investment operations in key basins, it's been noted the best option for smaller companies is to simply be acquired. The industry is tightening due to many factors, which greatly favors the large or established companies. Also, most revenue is tied to long-term fee-based contracts.

## Midstream Oil & Gas Compared to S&P 500

Key Stats	ENFR	SPY
YTD	5.19%	18.37%
3-Month	27.06%	12.21%
1-Year	-16.89%	18.37%
Div. Yield	7.23%	1.52%
Beta	1.73%	1.00%
Net Assets	42.96M	329.02B

The NA midstream ETF, ENFR, shows pandemic performance of -24.22%. Also, according to Morningstar, the impact of the pandemic contributed to a 33% fall in their U.S. Energy Index. This sector is trading at a 22% discount to the market compared to a 6% premium for the overall market. Upon economic recovery, this overall sector and many players in the industry will see a rampant increase in value.

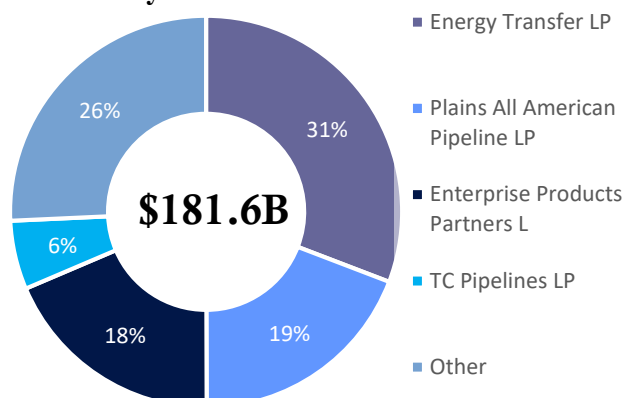




## Industry Analysis

In North America, Midstream Oil & Gas is dominated by a few key players. TTM data from Bloomberg shows the industry made \$181.6 Bn in revenue with Energy Transfer, Plains All American Pipeline, and Enterprise Product Partners making up over 66% of the total market share. Growth measures overall have decreased over the last three years, signaling a contraction and concentration in the market. Although overall industry growth down, profitability components and return measures have increased substantially. Such is indicating a more conservative environment and a focus on higher-return projects.

Industry Market Share



### Key Industry Trends

Profitability Components (%)	TTM	5-Yr CAGR
EBITDA Margin	40.4	7.0%
Profit Margin	26	32.8%
Return Measures (%)		
ROE	27.6	84.2%
ROCE	21.4	20.9%

Due to COVID-19, a decrease in oil prices, and other factors, it has led the industry to become far more disciplined in its spending. It's been noted that most midstream companies are now striving to fund all capex and distributions from cash flow. Such is shown as the focus has shifted in profitability and return measures. This strongly favors more established companies with strong cash flow, and diversified asset base serving multiple end markets.

### Industry Risks



Prolonged pandemic-based restrictions and lockdowns will wreak havoc on the energy sector. General slowdown in global GDP, recessions, and falling prices will prove detrimental to the industry.



Shift towards renewable energy, which is potentially amplified by the Biden Administration through the Green New Deal. With regulatory changes, including tax changes, the industry will likely see major changes in the future.



Commodity prices could substantially change forecast assumptions or harm midstream firms' credit profiles as most have largely fee-based contract profiles. Uncertainty during the pandemic and a shift to generate growth through self-funding, increased attention on maximizing cash flows, cost reduction and operational efficiency.

### Enterprise's Strategic Position

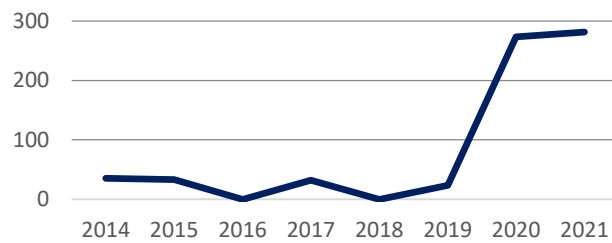
EPD has a fully integrated value chain of assets with over 50,000 miles of NGL, Crude, Natural Gas, Petrochemical and refined product pipelines, and geographic and product diversification, the company is diversified and built for the long run. Among the highest credit rating in the midstream space (BBB+/Baa1), major capital projects of \$3B focused on growth, and high and steadily growing operating margins and return on equity, their financial stability and strong management stewardship differentiate them amongst their peers. Being how barriers to entry are high and pipelines are only built out of necessity, Enterprise is poised to succeed as they have a dominance in the space in terms of assets, differentiation, location, and contract quality. With over 80% of their customers being investment grade and many of their contracts being long-term, with some plants at 100% contract capacity, Enterprise can continue their dominance in this industry.



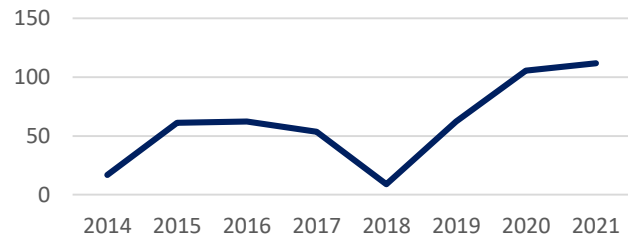
## Competitor Ratio Trends

### Price-to-Earnings

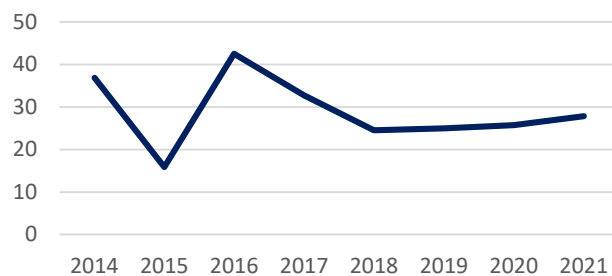
Kinder Morgan



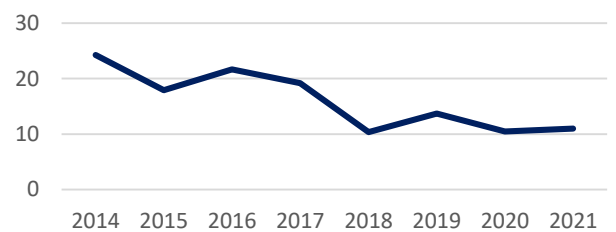
Williams Companies



Oneok Inc

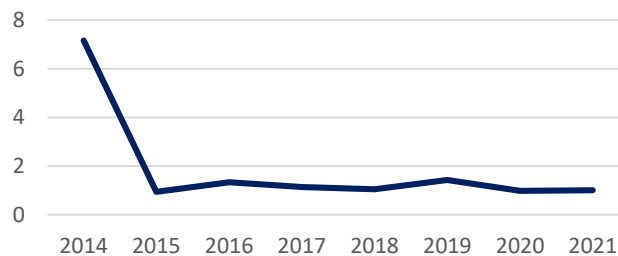


Magellan Midstream Partners LP

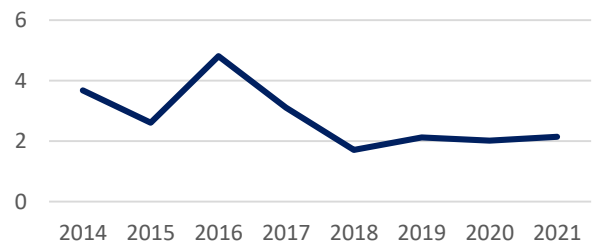


### Price-to-Book

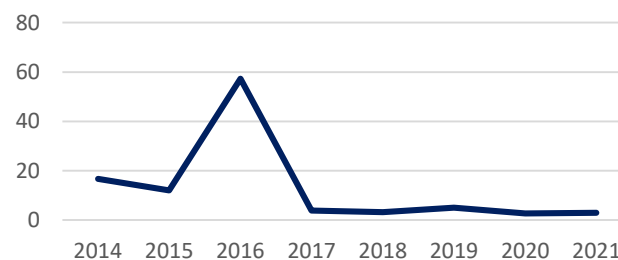
Kinder Morgan



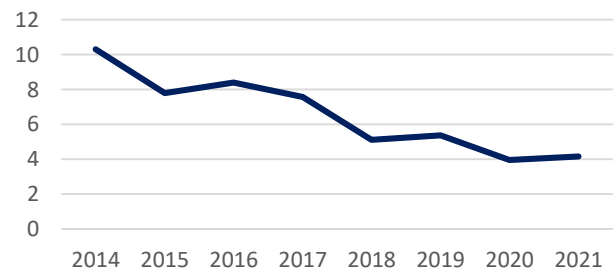
Williams Companies



Oneok Inc



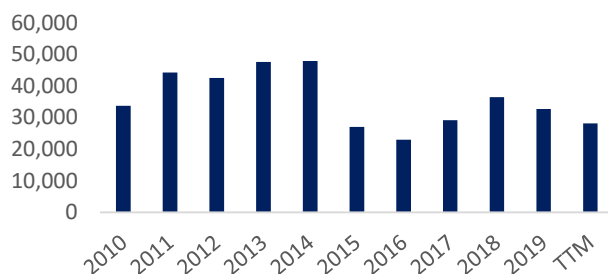
Magellan Midstream Partners LP



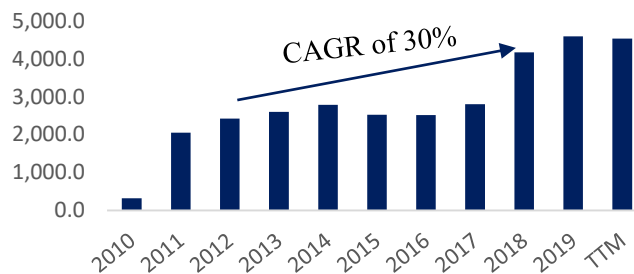


## Financial Analysis

Revenue (USD in Millions)

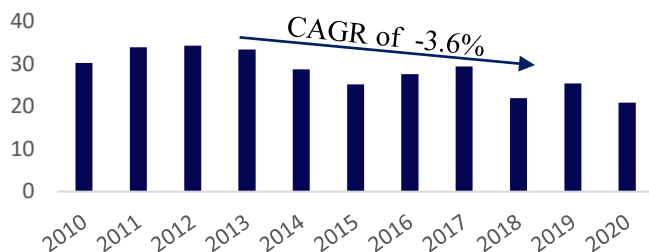


Net Income (USD in Millions)

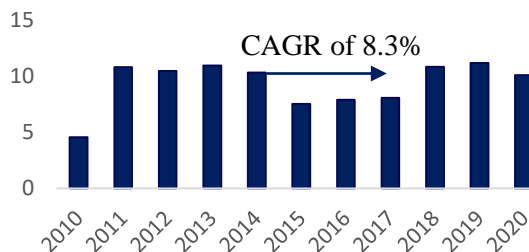


Enterprise had fantastic growth in net income as it grew at a CAGR of 30% since 2010, however, the company saw a slump in revenues with a CAGR of -1.7%. A plummet in oil prices caused the company to follow, which is shown in the sharp decline following 2014. The company also acquired Oiltanking in 2015 for \$6 bn, which greatly helps them capture growth opportunities in exports. Additionally, operating margins grew from 6.2 in 2010 to 16.8 in 2020 for an impressive CAGR of 10.4%. For 2020, petrochemicals were a strong performer with \$764 million in Q4, up from \$690 in 2019. With the new PDH plant, the company provided guidance of \$1.3 Bn in petrochemicals gross operating margin by 2024. This is be a strong performer for EPD in the future.

Current Liabilities (USD Millions)

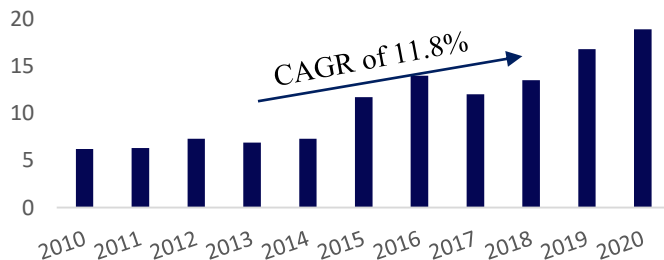


ROIC %

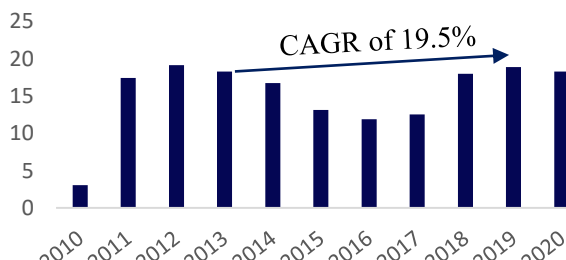


EPD has focused on cost optimization, with debt reduction, improved capital efficiency, and building capital. These fund future growth they have demonstrated the ability to generate cash while carrying a relatively low debt. The firm has taken strategic plays to exploit these positions by identifying and seizing growth opportunities, such as with the Oil tanking acquisition, Houston Ship Channel partnership and reversal of Seaway pipeline. This conservative spending and exemplary management stewardship has allowed EPD to be more profitable and generate more lucrative growth projects.

Operating Margin %



Return on Equity %

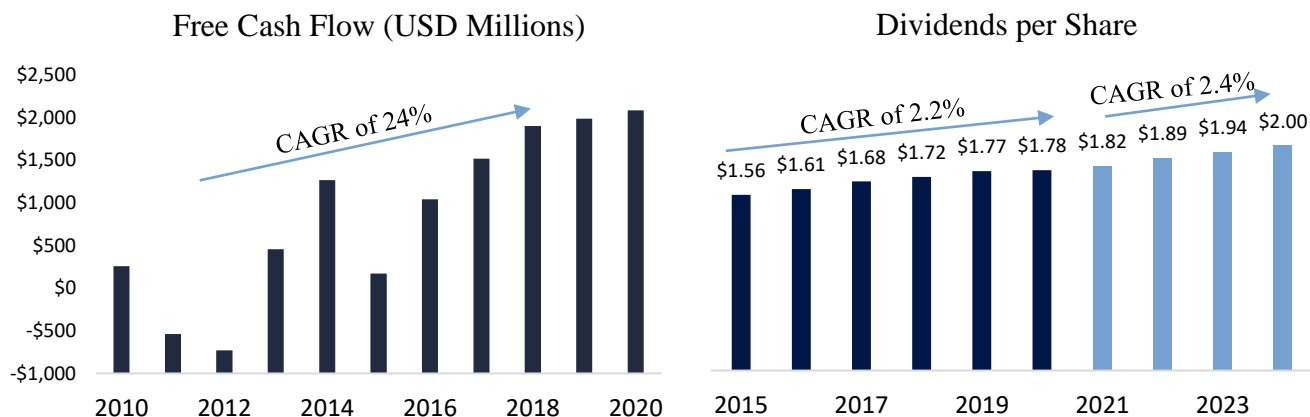


Operating margin has steadily increased since 2010 at a CAGR of 11.8%. EPD has over 21 consecutive years of distribution increases, and forward-looking growth projects which have grossed an average ROIC of 12% over the last 10 years. With the U.S. is responsible for >70% of global LPG export growth, petrochemical demand accounting for 60% of projected oil demand, and over 80% of their operating margin accounts for fee-based revenue, EPD is poised to succeed. EPD's established position, expansion of assets across the hydrocarbon chain, acquisitions and partnerships have allowed the company to increase their return on equity and operating margin over the decade.



# Financial Analysis

Liquidity: \$6.1 billion comprised of available credit capacity and unrestricted cash



Cash flow has grown at a CAGR of 24% over the last 10-year period. Driven by fixed fee long-term contracts with strong contract capacity coupled with EPD ability to create more demand pull from NGLs going through its pipelines with PDH and iBDH facilities. With extemporary stewardship and focus on liquidity, and cost reduction: \$2.1B in FCF 2020 and there NGL dominance, the company is well positioned for U.S. export growth. Here is the company's current CFFO allocation: payout ratio 64% and capital investments 32%.

Enterprise has a strong focus on returning capital to investors. Proven by over 21 consecutive years of distribution growth. With the firm's low industry Debt/EBITDA ratios of 3.7x and strong balance sheets, such is indicative of the ability to keep dividend safe. Lastly, with a high payout ratio of 89%, it may seem concerning, but EPD's strong balance sheet and unrestricted cash flow should ease concerns.

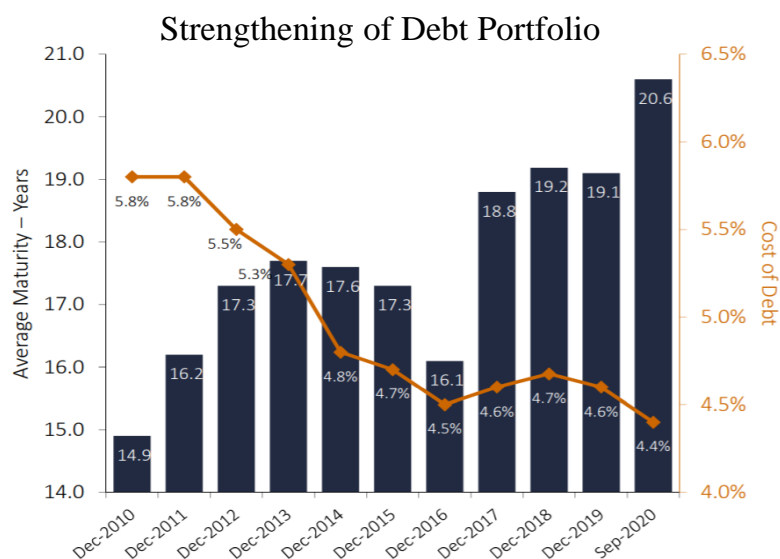
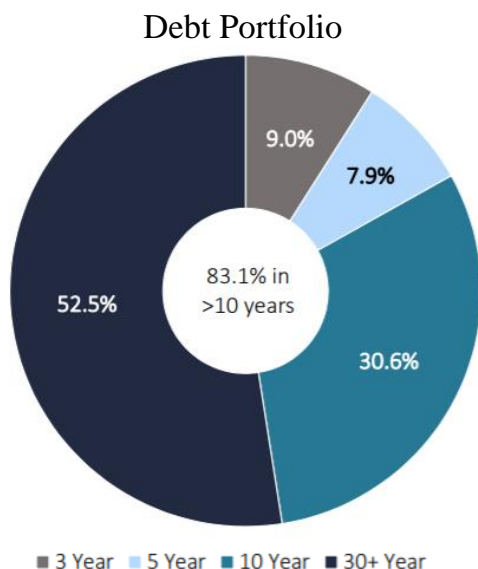
## Comparable Company Analysis:

Ticker	Company	Market Cap	P/E	P/B	Div. Yield	Avg. Vol
ENB	Enbridge Inc.	71.32B	46.53	1.6	7.44%	1.67
<b>EPD</b>	<b>Enterprise Products Partners L.P.</b>	<b>46.24B</b>	<b>10.46</b>	<b>1.8</b>	<b>8.34%</b>	<b>2.11</b>
TRP	TC Energy Corporation	40.74B	11.78	1.9	5.81%	1.88
KMI	Kinder Morgan, Inc.	32.97B	209.86	1.1	7.15%	2.66
WMB	The Williams Companies, Inc.	26.95B	117.26	2.3	7.36%	2.56
MPLX	MPLX LP	25.09B	-	2.0	11.66%	3.10
CQP	Cheniere Energy Partners, L.P.	19.7B	17.25	30.6	6.59%	2.64
OKE	ONEOK, Inc.	19.5B	30.62	3.2	8.45%	3.03
ET	Energy Transfer LP	18.37B	-	1.0	9.00%	3.27
PBA	Pembina Pipeline Corporation	15.24B	15.12	1.6	-	2.06
<b>Averages</b>		<b>30</b>	<b>57</b>	<b>4.7</b>	<b>7.98%</b>	<b>2.50</b>

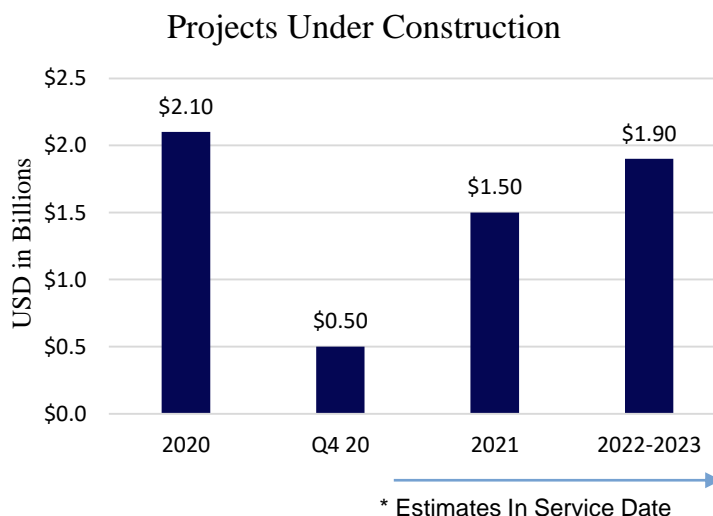
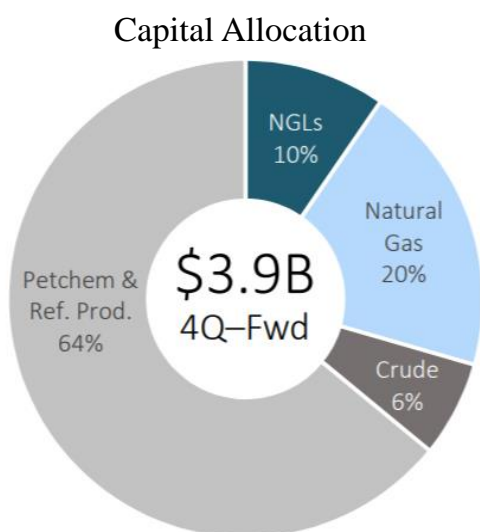


## Debt & Capital Projects

Enterprise has maintained an impressive debt portfolio with increasing maturities at a decreasing cost. EPD's debt to equity ratio has been rather constant over the last 10 years but has declined at a CAGR of -0.26%. Of the \$32.1B notes issued during this time, 52.5% are 30+ year, and 20.6% are 10 year. This means that 83.1% of debt has a maturity of over 10 years. According to the company, the weighted average term to maturity has increased as the cost of debt has decreased. With there 99.2 fixed rate debt, the company's debt portfolio looks attractive.



As mentioned, the industry operates during significant barriers to entry, with regulations coming from multiple oversight agencies. Even so, Enterprise has reported roughly \$4B of major capital projects under construction. These capital projects stretch across the hydrocarbon chain: Natural Gas Liquids, Natural Gas, Crude Oil, Petrochemical/Refined Products. 13 of the 16 projects are set to be in-service before end of 2021.





## Economic Moat

In this industry, having a strong network of pipelines which server multiple end markets and supplied by many regions is much more valuable than a more scattered collection of assets. Networks allow these companies to optimize the hydrocarbons across the system and capture differentials. This is particularly true for Enterprise as it has advantages in the following four areas:

### **Asset Quality – Nearly Impossible replication of the collection of assets across value chain**

The core of the asset base is the NGL network with over 20,000 miles of regulated pipelines across 27 states which deliver over 1.8MM bpd. For its unregulated assets, it includes over 1MM bpd of NGL fractionation capacity, 170 MM barrels of storage, and export terminals with dock access. Additionally, they have several petrochemical assets, propylene, and propane dehydrogenation. These help allow for the extraction of higher value olefin which has proven to be greatly beneficial. Enterprise's many assets, buildup of NGL infrastructure, and the firm's attention towards exports has created strong asset quality. In doing so, it has helped positioned Enterprise to capture market share and differentials between the United States and International markets. The company's connection stretches to every major U.S. shale basin and ethylene cracker, roughly 90% of refineries east of the Rockies and includes export facilities out of the Gulf Coast.

### **Location – 5,700 miles of crude pipelines in TX, OK, & NM: Connecting locations & export hubs**

Transporting roughly 1.8 MM bpd and owning a staggering 37 MM barrels of storage. According to the company, they plan on new pipeline construction from the coast to midland. Dock access is extremely important, and the firm announced partnership with Houston Ship Channel. In doing so, they have additional export opportunities of 21 MM barrels of storage and access to 6 dock ships, 2 barge docks and Suzemax tankers, which are the largest. Competitor replication is extremely difficult.

### **Contract Quality – Strong firm reserve capacity: Nearly 80% sign 15–20-year contracts**

For their PDH plant, 100% of the 750,000 lbs/day are contracted for 15 years (such is the same for the iBDH plant) and Enterprise has been able to obtain area dedication contracts. Now, producers are obligated to provide a contracted number of barrels per day and then convert the contract to a long-term fee-based contract. This allows the company to navigate periods of stress and provides relationships with producers. This will serve to be very important and beneficial during this and the upcoming year. Lastly, these industry standard contracts provide the shippers reserved capacity and make them pay an origination fee as well.

### **Barriers to Entry – Federal Energy Regulatory Commission Oversight and development hurdles**

In the U.S., pipelines are approved by regulators only when there is an economic need, and pipeline development takes about three years, according to the U.S. Energy Information Administration. Regulatory oversight is provided by the Federal Energy Regulatory Commission and at the state and local levels. Any new pipelines under consideration must contend with the environmental and permitting guidelines; this creates massive delays and additional costs. According to Morningstar, midstream companies can earn an intangible moat source for operating under a difficult regulatory environment. Projects are locked in through long-term contracts with producers before even breaking ground on the project. If contracts cannot be secured, the pipeline will not be built.

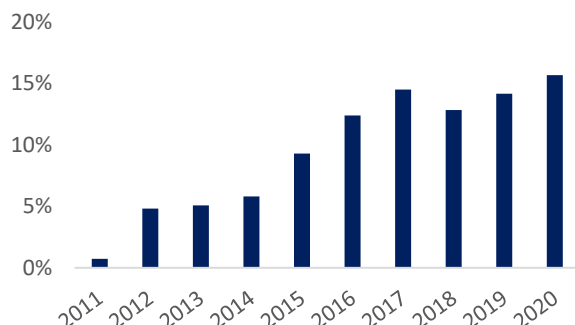




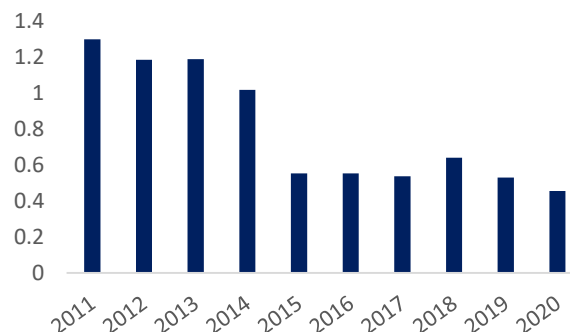
## Dupont Analysis

The Dupont Analysis provides a framework for analyzing performance and is used to analyze different drivers of return on equity (ROE). The decomposition of ROE allows one to focus on key metrics of financial performance. The Analysis breaks ROE into its three components to determine what financial activities are most responsible for changes in ROE: **Profit Margin, Asset Turnover, and Financial Leverage:**

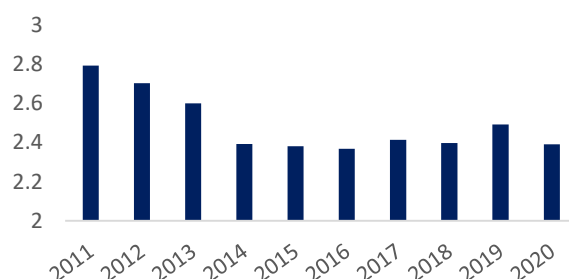
Profit Margin 10-Yr



Asset Turnover 10-Yr



Financial Leverage 10-Yr



### Compound Annual Growth Rate (CAGR)

	Profit Margin	Asset Turnover	Financial Leverage
EPD	35.99%	-9.93%	-1.54%
KMI	3.62%	-5.00%	-4.44%

Comparing Enterprise's to a top competitor, Kinder Morgan, it provides insight into the components that are responsible for the changes in ROE. Over the 10-Yr period, KMI had very unstable and weak growth in profit margin. For both, asset turnover and fin-Leverage were similar.

### DuPont Analysis – Enterprise Product Partners

Enterprise's profit margin over a ten-year period is remarkable with its CAGR of 36%. This implies the firm is generating more sales while maintaining a lower cost of goods. At first glance, asset turnover may be worrisome. However, in many industries, such as energy, low asset turnover is expected as they require heavy investments; thus, the company will see a high profit margin and a lower asset turnover – the company acquired Oiltankers in 2015, grown assets by a CAGR of 6.8% and investments grew at a CAGR of 7.3% over this time with strategic growth projects. Lastly, EPD has reduced its overall financial leverage, and has maintained a steady range for the last 7 years. According to Alerian, the average during that period was 4.15x. Enterprise is below the MLP Benchmark Index of 3.5-3.99x.



## Valuation

### DDM (Base)

<i>Three Stage Growth Model</i>	
Stage 1 Growth Rate	0.50%
Years in Stage 1	1
Stage 2 Growth Rate	1.50%
Years in Stage 2	3
Stage 3 Growth Rate	0.50%
Dividends per share, LTM	\$1.78

### DDM (Bull)

<i>Three Stage Growth Model</i>	
Stage 1 Growth Rate	0.50%
Years in Stage 1	1
Stage 2 Growth Rate	3.75%
Years in Stage 2	5
Stage 3 Growth Rate	1.00%
Dividends per share, LTM	\$1.78

All valuation models assumed a linear growth path, 2.18B shares outstanding, and a cost of equity capital of 7.33%. Each model assumed slow grow of 0.5% during 2021 due to the pandemic.

### Dividend Discount Model: Base Case

For the base case model, I increased the second stage growth rate to 1.50% for three years as the company was doing well prior to the pandemic. The company will feel tension during economic restrictions but will emerge strong as they were previously operating. Terminal growth assumption was based upon industry changes towards renewables. This resulted in the price of \$27.85

### Dividend Discount Model: Bull Case

Second growth stage was calculated by taking the CAGR growth of dividends in 2008-2020, which resulted in a CAGR of 4.75%. I lowered the rate a full percentage point as the company's dividend payout ratio is rather high, 83%, but its only 61% based on cash flow. Terminal rate was based upon EPD's ability to adapt its assets to changing industry environment – if needed. This resulted in the price of \$29.67

FCF (Base)		FCFE (Bull)		FCF and FCFE models:	
<i>Two Stage Growth Model</i>		<i>Two Stage Growth Model</i>		Total Debt (\$ millions)	\$27,625.1
Stage 1 Growth Rate	0.50%	Stage 1 Growth Rate	0.50%	Cash (\$ millions)	\$410.00
Years in Stage 1	1	Years in Stage 1	1	WACC (%)	5.17%
Stage 2 Growth Rate	2.32%	Stage 2 Growth Rate	3.00%	Corporate tax rate (%)	0.96%
Years in Stage 2	5	Years in Stage 2	5		
Free Cash Flow, LTM	\$2,084.00	Free Cash Flow, LTM	\$2,084.00		

### Free Cash Flow Model: Base Case

EPD has an expansive and competitive advantage in assets and quality contracts. Based on 10-Yr CAGR of 2.32% for FCF and the firm's ability to generate increasing net income, maintain high returns on equity, and growth strategies as shown in recent acquisitions, I assumed the 2.32% for 5 years. This resulted in a price of \$22.88

### Free Cash Flow to Equity Model: Bull Case

For the more aggressive model, this assumed the company can emerge from the pandemic stronger and economic activity will resume close to pre-pandemic levels. Based on financial performance leading into 2020, the firm's stretch across the full hydrocarbon value chain and marketing activates, I assumed a 3% growth rate for 5 years. This resulted in a price of \$25.42

DDM Average = \$28.45  
50% Average = \$14.38



FCF (Base) = \$22.88  
25% Average = \$5.72



FCFE (Bull) = \$25.42  
25% Average = \$6.36

**\$26.45**



## Investment Risk & Uncertainty

### Reduce In NGL Demand

A sharp decline for natural gas liquids from petrochemical industry in the Gulf of Mexico. Reduced demand for ethane could dampen Enterprise's gross operating margin as 50% is made up from the NGL business. Inability to met NGL demand would serve as a great issues and cap earning upside.

*Expansion across full value chain such as petrochemicals remain drivers*

### COVID-19

The energy sector has been beaten down and a prolonged period of lockdown and economic restrictions will put increased burden on the sector. A prolonged COVID-19 based lockdown and restrictions would dampen Enterprise's ability to generate cash flow which is crucial to operate.

*EPD has great long-term contract capacity and exports have been resilient*

### Commodity Price Risk

Naturally, Enterprise assumes commodity risk in both volume and ownership of their products: natural gas, crude and NGLs.

*Hedges and diversified assets help insulate as well as vertical integration*

### ESG

Expansion into petrochemicals brings on ESG risks with managing carbon emissions

*New initiatives in solar sourced power and hydrocarbons. Renewed focus on reduced emissions and ESG awareness into 2021*



## Appendix

### **Data Sources**

Morningstar Direct

CAP-IQ

Bloomberg Terminal

Enterprise Products Partners L.P.

JP Morgan Asset Management

SEC 10k/8k – Enterprise Product Partners

U.S. Energy Information Administration

Center of Disease Control – COVID-19 Data

Morgan Stanley – Global Economic Outlook 2021

Goldman Sachs – Global Economic Outlook 2021

Alerian Insights – Midstream and MLPs

S&P global – Midstream Energy

### **Images**

Enterprise Products Partners L.P. Corporate website

U.S. Energy Information Administration

CDC – Covid-19 Data Tracker